

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 09/847,442

REMARKS

This Amendment, submitted in response to the Office Action dated November 15, 2004, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-10 remain pending in the application. Claims-3 and 6-10 have been rejected under 35 U.S.C. § 102 as being anticipated by Naoi (U.S.P. 6,351,263). Claims 4-5 have been rejected under 35 U.S.C. § 103 as being unpatentable over Naoi in view of Tanabe (U.S.P. 6,646,649). We propose the following comments in traversal of the prior art rejections.

Applicant's invention relates to a color image processing method. In a conventional technique, an R,G,B color input must be converted to a C, M, Y, K color coordinate to undergo printing. Under conventional conversion, if the original R, G, B input included both text and an image, the same form of color conversion would be applied to both the text and the image portions. However, this would result in a text output of insufficient brightness, poor color continuity and poor color tone in the image portion.

Applicant's invention overcomes the above deficiencies. Referring to an exemplary embodiment as illustrated in Fig. 3, page information 11 including text and image is input to input section 10. A data determination device 14 determines a text portion and an image portion to extract each portion from the original input. Based on the type of portion, a color conversion selector 16 selects one of several color conversion tables 16 to be mutually used for either the text portion or the image portion. Output section 17 merges the text and image data after conversion to provide an output for a plate making process, for example.

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Turning to the cited art, Naoi relates to an image processor that provides disparate treatment of gamma corrections (Y, M, C, K) depending on text or image type. Fig. 1 illustrates the overall system, including a development unit 29 and development memory 29-1. These units store Y, M, C, K data that have been converted from R, G, B data which was stored in page memory 27. Alternatively, the memory unit 29-1 can store R, G, B data and convert the data prior to delivery to a print system. Col. 2, line 65 to col. 3, line 5. A color process unit 25 includes gamma conversion tables to convert Y, M, C, K data which can include a gamma adjustment to adjust the output density. Col. 3, lines 6-31.

Tanabe relates to an image display device, where a color-printable image is displayed on a monochrome display. The display distinguishes a background portion from a text portion and outputs the monochrome representation based on whether the portion comprises text or background.

The Examiner maintains that Naoi teaches each feature of independent claim 1. Applicant propose arguing that the rejection is not supported for at least the following two reasons.

First, claim 1 describes a color conversion section for practicing mutually different color conversions for both image information and character information of a page. The Examiner cites Fig. 13, steps S116 and S115 and corresponding text to teach this aspect of the invention. However, the cited portion relates to a gamma correction of Y, M, C, K data. An upward or downward adjustment, such as in a range +/- 7 from a reference point is provided to adjust a density of a text part or an image part or both, which in turn provides an indication of a gamma correction table of C, M, Y, K data. Col. 6, lines 14-30. We would submit that the cited portion

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relates to a density conversion of a color signal C, M, Y, K rather than a color conversion as claimed. See Naoi col. 3, lines 6-18. For instance, Fig. 15 of Naoi specifically contemplates a log color conversion of R, G, B to C, M, Y with undercolor removal. Col. 7, lines 26-30. This is in contradistinction to gamma correction, which occurs after the color conversion (see 15, step S144).

Second, relatedly, independent claim 1 describes that the color conversion are mutually different for the image part and the text part. Even assuming *arguendo* that the density correction corresponds to a color adjustment, we would submit that the adjustment is made relative to a common color input. As illustrated by Fig. 15, the color input is the result of a color common conversion, such as via a log conversion. Therefore, the print and image data would not be converted by mutually different conversions, but in fact share a common color conversion. Therefore, we would submit that claim 1 is not anticipated for at least these reasons.

Because independent claim 10 includes features similar to that discussed above for claim 1, claim 10 is also patentable for the reasons set forth above. Claims 2-9 are patentable based on their dependency.

With further regard to claim 2, this claim describes a data determination means which a) determines whether pieces of information comprise image information or character information, and b) which causes storage of the data in mutually different files. With regard to feature a), the Examiner cites elements 27, 28 and 2B. With regard to feature b), the Examiner cites again to Fig. 13, elements S115 and S116. Applicant submits that the Examiner's citations are not pertinent features of claim 2.

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With regard to the determination element, in Naoi, memory 27 stores the page information in the form of R, G, B data prior to conversion to Y, M, C, K. There is no basis to conclude that the memory does not also include the text elements in addition to the image elements of the page. See col. 3, lines 50-58, which describes that color conversion occurs until all pixel data have been read from page storage unit 28. Element 2B is described as storage for character patterns, but does not specify any form of determination being made. Therefore, the cited portions of Naoi do not teach determination between image information or character information.

With regard to the separate storage of elements, the Examiner contends that Fig. 13 necessarily teaches this aspect. However, Applicant submits that the processing can be done as a bit map which would not require separate storage of image and text files as claimed. Col. 7, lines 1-5. In other words, the separate file storage is not an inherent feature of Naoi.

Therefore, claim 2 is patentable for these additional reasons. Because claim 3 includes a recitation of a determination unit as discussed above for claim 2, claim 3 is also patentable for similar reasons.

With further regard to claims 4-5, the Examiner concedes that Naoi does not teach feature of these claims, but cites Tanabe to correct this deficiency. However, Tanabe does not make up for the deficiencies of Naoi. Moreover, the Examiner contends that one skilled in the art would be motivated to combine Naoi and Tanabe for purposes of providing distinction between a background and a text. However, because Naoi already provides a density adjustment between text and non-text areas, the contrast matters identified by the Examiner are already corrected by

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the primary reference. Accordingly, there is no reason to combine the features of Tanabe with Naoi. Claims 4-5 are patentable for this additional reason.

Applicant propose adding claims 11-13 to describe features of the invention more particularly.

In view of the above, Applicant submits that claims 1-13 are in condition for allowance. Therefore it is respectfully requested that the subject application be passed to issue at the earliest possible time. The Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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